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ABSTRACT

This examination of the relationship between illiteracy and the labor market in California describes in general terms the effects of widespread illiteracy on employers, the unemployed, employees, and the California economy. It discusses current programs which address the lack of basic literacy skills in the labor market, and identifies some of the elements that contribute to successful programs. Finally, the report contains a number of policy and program suggestions directed particularly toward the state library and local public library literacy programs, focusing on how their current efforts can relate more strongly to employment and the labor market. Completed in a 2-month period, the study gathered and organized currently available information in order to define the range of the problem; to assess services which were currently offered, extensive telephone interviews were conducted. Major sections of the paper comprise: (1) Defining the Illiteracy Problem as It Relates to Employment; (2) Current Literacy Delivery System as It Relates to Employment and Job Training; and (3) Suggested Policies and Strategies for Literacy and Employment, with Particular Focus on the Public Library Program. (THC)

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Literacy, Employment and the California Economy: A Study and Recommendations for Policy and Program for the California Literacy Campaign

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Preface and Acknowledgements

This report stems from the on-going interest of the California State Library in strengthening its current literacy programs. These programs are the only ones of their kind in the nation which provide statewide, public programs to combat illiteracy. Our primary policy focus of this report is directed towards how the State and local public library literacy programs can improve their relationship to employment and job training problems.

When we began this report, we found that information with regard to illiteracy and the workplace was scattered and nonsystematic, and that few programs (with notable exceptions) had addressed this issue. Since this report was undertaken and completed in the two-month period from May 1 to June 30, 1985, time and resource limitations kept us from being able to generate any systematic new data on the nature of the problem. Rather, we attempted to gather and organize information which was currently available, in order to define the range of the problem. To assess what services were currently being offered, we engaged in extensive telephone interviewing; we hope we have not overlooked too many significant efforts. For any such oversights, we express our regrets in advance.

This project would not have been possible without the continued support of State Librarian Gary E. Strong. Our appreciation also goes to Nancy Percy, Assistant State Librarian and to Carmela Ruby, consultant, who developed the concepts behind this study, provided extensive assistance and consultation, and were extremely patient with some of our difficulties of design or execution. In addition, Sandi Martin, Martín Gómez, and Al Bennett of the State Library, among many others at the Library, were continually helpful to our efforts. And we would like to express our particular thanks for the cooperation of the public library literacy programs which provided us with invaluable insights and information. We would also like to thank the staff of Community Economics, Inc., Oakland, California, for providing support services to this project.

While the above deserve a great deal of the credit for this project, we take full responsibility for any problems and controversies which this report may create. It is offered in the spirit of an initial effort to further state policy in this important area, and in that spirit, we hope the results are useful.

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EXECUTIVE SUMMARY

This report examines the relationship between illiteracy and the labor market in California. It describes in general terms the effects of widespread illiteracy on employers, the unemployed, employees and the California economy. It discusses current programs which address, with varying degrees of success, the lack of basic literacy skills in the labor market, and identifies some of the elements which contribute to successful programs. Finally, the report contains a number of policy and program suggestions directed particularly towards the State Library and local public library literacy programs, focussing on how their current efforts can relate more strongly to employment and the labor market.

I. The problem of illiteracy as it relates to employment.

According to the California Adult Competency Survey (Nomos Institute, 1979), 25% of California adults are functionally illiterate. High dropout rates for high school students and low levels of competency for many other adults erode the quality of the workforce.

For employers, the illiteracy problem is experienced as:

*limited pool of qualified workers, particularly for insurance and financial sectors in large urban areas

*reduced productivity among current workforce

*increased training and re-training costs as the result of limited ability of employees to adapt to change

*health and safety problems

For unemployed illiterate and semi-literate individuals, the problem is experienced as:

*difficulty of finding and keeping a job

*inability to qualify for job training programs

*very limited range of work to choose from

For current employees, the problem is experienced as:

*inability to adjust when plant closures occur

*inability to upgrade skills to adapt to technological change

*inability to accept promotions which require use of literacy skills

*likelihood of being trapped in low-skill, low paid, insecure jobs

*health and safety problems

As California's economy becomes increasingly information-based, the lack of basic literacy skills among significant proportions of the workforce becomes even more critical. The nature of work in both the manufacturing and service sectors has required processing of greater amounts of information, and the future direction of the economy towards more flexible modes of production will put basic literacy skills in ever greater demand. Job descriptions in nearly every category in which job growth is expected require literacy skills, and the level of reading demanded by a great deal of job-related material is well above the levels of a significant proportion of the labor force.

II. **The delivery of literacy services and the employment and training sector.**

While significant efforts are currently being made to address illiteracy and to upgrade basic skills, serious gaps exist in the delivery of services to illiterate and semi-literate adults. Among those programs already involved in basic skills training, various limitations exist which prevent them from adequately responding to the needs of illiterate adults. Among labor and management, recognition of the problem has been limited, except where a crisis or other event created an awareness of the extent of illiteracy in the workforce.

While the following programs provide some basic skills training, each have some built-in limitations in their ability to address the problem:

*Public library programs which rely primarily on one-to-one literacy instruction are limited in their ability to provide intensive training to job seekers.

*Adult Basic Education, while by far the largest purveyor of basic skills classes, focuses primarily on English as a Second Language and on adults who have skill levels at 6th grade or above.

*Job Training Partnership Act (JTPA) programs generally reject participants below a 6th grade level, and face an incentive structure which encourages skill-specific training which will lead to rapid job placements, rather than basic skills development.

*Welfare employment programs provide little or no assessment of literacy skills, and no referrals when skill deficiencies are discovered.

*Workplace efforts seem primarily to be undertaken at the time of crisis, such as a plant closure, lawsuit, or inability to recruit qualified workers. In certain industries, such as insurance, in-house programs have been developed which provide literacy upgrading for current employees.

We have found that when the efforts of various agencies or sectors have been combined, the basic skills needs of illiterate adults have been better addressed. There are various programs which in different ways combine the resources of the libraries, JTPA, ABE, private sector employers, unions, community-based organizations, and volunteer literacy organizations to successfully address both basic skills needs and job needs of illiterate adults.

III. Suggested policies and strategies for relating literacy and employment, with particular focus on the public library program.

A. General considerations for policy

1. State policy must recognize the link between illiteracy and the productivity of the economy.

2. Broad public recognition and political leadership will be necessary for the implementation of new policies.

3. Maintaining and building upon the current pluralistic delivery system provides the direction for successful programs.

4. Current federal, state and local funding constraints leads to the need to leverage various public and private sources of money.

5. Effective planning, coordination, and cooperation among service deliverers is key to developing successful programs.

6. Addressing the problem will require more accurate data, and more effective assessment and accountability of programs.

7. The employment and productivity link is not the only way to address literacy problems, but should be balanced with broader social needs for literacy.

B. Suggested policies for local libraries

We believe that local libraries can strengthen their relationship to the labor market by developing their capabilities to serve as a center for literacy services, including training of tutors, development of instructional materials, assessment of competency levels in the workplace, and providing information and referral to available services, along with one-on-one and group instruction. To accomplish this, the libraries can do the following:

*Contract with JTPA programs, where appropriate

*Complement job training programs

*Complement ABE

*Market library programs to public agencies dealing with employment

*Contract with private sector and government employers to provide services

*Provide literacy services to labor unions

*Develop computer-assisted instruction

*Organize local alliances to secure political support, leverage new resources, and increase public awareness

*Become a resource and referral center for the coordination of a continuum of literacy services.

C. Suggested actions for the State Library

The ability of local libraries to be successful in accomplishing the program goals above hinges upon the ability of the California State Library to provide statewide leadership and assistance. We have identified a number of steps which we feel could be taken in the short term:

1. Creation of a statewide alliance of employers, unions, literacy providers, and political leaders who can provide leadership, direction, and resources.

2. Planning and implementation of a statewide conference to develop policy and support.

3. Development of public awareness and information through an employer survey and a literacy/employment information campaign.

Longer-term goals include:

1. Development of stable and adequate funding sources from both the private and the public sector.

2. Development of a strengthened role for the State Library as a coordinator of programs through a Literacy Assistance Center.

3. Development of a local project to demonstrate the effectiveness of local mobilizations for literacy which combine public and private resources in a continuum of services.

Introduction

The recognition of the problem of extensive illiteracy among large numbers of the adult population appears to be growing. The problem has recently been addressed in a Presidential initiative; by a resolution of the Governor of California; by the private sector which has initiated and contributed to various programs to combat illiteracy; in a growing volume of research efforts to measure the problem and design appropriate policy; in the press, particularly around the publication of Jonathan Kozol's Illiterate America (1985), which has sounded the call for a nationwide mobilization against illiteracy; and, in California, by the activity of the public libraries in beginning the California Literacy Campaign.

This activity has taken place in the context of rapid economic change, particularly in California which has been on the cutting edge of the new 'information' economy. In both manufacturing and service sectors, California has seen the rise of new industries, new productive processes, and new technologies which require far more extensive application and processing of information than ever before. For most jobs in nearly every sector, literacy skill requirements are increasing. In the context of the California economy, the recent focus on literacy could not be more appropriate.

The interest in adult literacy should be understood as a significant part of the general consensus about the importance of education which has characterized state government in the past five years. In large part because of the pressure of economic change, the state has re-examined and strengthened its commitment to most levels of the educational system. This commitment is based at least in part on the recognition that the success of the California economy depends on the extensive skills of its workforce. Since adult literacy is a significant part of the general level of skill upgrading which is needed, hopefully it too will achieve the level of recognition which is appropriate to the problem.

This report is focused on policies which the California State Library can pursue in its efforts to relate its literacy programs to employment, job training, and the California economy. In this report, we attempt to address the following:

1. To what extent is the literacy problem a serious one in relation to employment and the workplace, and what are the various manifestations of this problem?

2. What activities and programs have been undertaken to respond to literacy problems in relation to employment, and what types of programs appear to be successful?

3. What policies and program directions can the local and state library literacy programs pursue in order to strengthen their connection to the labor market?

We hope that this report will stimulate further discussion, along with program and policy development, which will lead to effective responses to the critical literacy problem facing California.

I. Defining the literacy problem as it relates to employment

Summary: Low levels of literacy skills are a significant problem in the labor market and at the workplace. Illiteracy causes a range of serious effects for current employees, for the unemployed, and for employers. While some widely used definitions of literacy have been able to generate some agreed-upon numbers of adult illiterates in the U.S. and in California, the data is limited with regard to specific workplace situations. However, from the many different experiences of job training programs, of employers, and of employees, there can be little doubt that the problem is serious and, because of increasing skill requirements, appears to be growing. In particular, the new information economy increases the problems caused by widespread illiteracy.

A. Current estimates and definitions

The extent of the illiteracy problem has for the most part been measured in general terms, not in terms of employment. Harman (1984) estimates there may be as many as 60 million functionally illiterate adults in the U.S., an estimate shared by Kozol (1985) who decribes 25 million adults reading at less than the 5th grade level and another 35 million at less than the 9th grade level.

Other estimates include the Adult Performance Level (APL) study (Northcutt, 1975) which indicated that over 50 million adults in this country were unable to function adequately when dealing with literacy related matters. In the 1980 Census, 24 million people age 25 and over (18% of the total population in this age range) were classified as illiterate (NCES, 1984). Provisional 1980 Census figures also showed that 31% of adult whites, 49% of blacks and 57% of Hispanics had not completed high school (cited in Reder, 1985). The National Assessment for Educational Progress (1976) found that 41.6% of 17 year old black youth were functionally illiterate, while 20% of all urban youth were significantly deficient in key cognitive skills.

The estimates for California are based in part on 1980 U.S. Census data and the California Competency Survey (Nomos,1979), which estimated that 25% of the state's adult population was functionally illiterate. The State Dept. of Education estimates that 4 to 4.5 million adults are functionally illiterate and of these adults, maybe 6.4% or 256,833 adults are receiving some kind of literacy instruction. According to 1980 Census data for California, 6.5 million adults lack a high school diploma. In Los Angeles, 465,000 adults out of a total adult population of 2,325,360 are considered functionally illiterate. There may be 120,000 adult illiterates in Alameda County; for Contra Costa County, 1980 Census figures estimate that 93,000 adults may be functionally illiterate; in Kern County, as many as 40,000 adults may be functionally illiterate.

With regard to the labor force, Renee Lerch of the National Adult Literacy Project has estimated that 36% of the unemployed are functionally illiterate (interview). For those working, the U.S. Dept. of Education has estimated that 15% of employees currently employed are illiterate. (Delker, 1983)

One of the problems with these numbers is that there is no apparent consensus on what level of skills constitute literacy, and therefore little consistency in the data. Widely used definitions are general, including such definitions as: lack of those skills necessary to achieve self-determined objectives (functional illiteracy) (Hunter and Harman, 1979); inability to read and write, or to apply reading and writing for specific purposes and contexts (Scribner and Cole, 1978); the inability to perform carefully defined reading and writing tasks (Northcutt, 1975); or semiliteracy as used by Kozol (1985) for those whose reading levels are unequal to societal demands. Whatever the definition used, however, there has been little disagreement that significant numbers of adults are illiterate.

In this report, we suggest some definitions which relate to employment. While these definitions do not generate hard data in themselves, they help to organize the substantial amount of evidence that indicates the literacy problem is serious for individuals in the labor market, for employers, and for a job training and educational system which is trying to provide an access point to stable employment.

B. Literacy problems as experienced by employers.

> "Without basic skills, all the vocational training in the world will do no good."
> -- Donald Mann, National Vice-President for Personnel, Prudential Life Insurance, Newark, New Jersey

> "Employers want to know two things: will they show up on time, and can they read and write?"
> --Michael Bernick, Director, San Francisco Renaissance, a job training agency

One of the more systematic sources of information on literacy problems in the workplace comes from surveys of employers, and from analysis of literacy requirements for job performance. Lack of basic skills is a frequently cited cause of a range of workplace problems, as categorized below.

An employer's concerns about basic skills can be defined as follows: what level of literacy is necessary so that the job gets done satisfactorily, and so that the enterprise can respond to changing needs and demands? For purposes of defining the problem population as it affects employers, the question becomes: to what extent do current employees, or potential employees in

the labor market in which the enterprise is functioning, have inadequate literacy skills for present and future job demands?

One of the most useful surveys of businesses on basic skills comes from the Center for Public Resources (Henry and Raymond, 1983). This survey reported that 40% of the responding companies found reading deficiencies in high school graduate personnel filling secretarial/clerical and technical positions. Over one-half of the respondents cited writing deficiencies among secretarial, skilled labor, managerial, supervisory and bookkeeping personnel. The most frequently cited problems were poor grammar, spelling and punctuation. Both businesses and unions identified widespread deficiencies in mathematics and science among high-school graduates. (Henry and Raymond, 1983)

Business leaders at a 1982 seminar sponsored by the College Board and the American Society for Training and Development judged inadequate reading levels to be the single largest problem for employers (Henry and Raymond, 1983). A 1981 study by the National Center for Research in Vocational Education of 775 members of the National Association of Manufacturers found that 63% of those surveyed urged basic skills teaching "as the most important improvement that secondary vocational education should make." (AAACE factsheet, 1984) According to the Literacy 85 survey (Winterbauer and Ploetz, 1985), reading was rated as most critical for workers in high technology industries, where the importance of reading for assembly-line workers was considered critical, and very important for office and clerical workers in high technology firms.

Prof. Larry Mikulecky of the University of Indiana noted in a U.S. News and World Report article that, "Illiterate high school graduates are only the tip of the iceberg that includes auto mechanics unable to comprehend repair manuals, bureaucrats unable to follow written policy changes, technicians unable to read and understand safety precautions for oil pipelines or nuclear power plants, and anyone else who has found the literacy demands of a job outstripping his or her abilities." ("A Nation of Illiterates", 5/17/82, p. 53)

The concerns of employers relative to the basic skills of their workforce will vary widely. In some cases, employers will rigorously screen out those with low basic skills, if the labor market will so permit. In other cases, for certain types of manual or low-skilled jobs, literacy skills are unimportant to the performance of the job and their lack may cause few problems. However, in widely diverse cases, serious problems have been reported, which can be summarized as follows:

1. Inability to recruit qualified workers. In a particular labor market, the potential labor force available may be lacking in the skills required by its employers in a classic

job-skills mismatch. This has been reported to us in white-collar centers such as Los Angeles, San Francisco and Oakland.

The insurance industry in Los Angeles, which requires substantial literacy skills, is competing for a limited pool of qualified white collar workers, which, given the size of the industry, is running short and requires substantial improvement of skill levels. Dr. Iris Elfenbein, of the American Council of Life Insurance, noted with regard to L.A., "Functional illiteracy is becoming an affirmative action issue for businesses. If you look at the up and coming pool of entry-level workers in L.A., many are from minority and new immigrant populations. We are finding that young clerical workers are being hired who are not proficient in spelling or reading." (Interview)

Betty Bivens of WRITE, a Los Angeles program which teaches basic skills to employees, states, "Employers are being driven to recognize that they are going to have problems with basic skills, especially those businesses that employ a large, entry-level worker population such as Blue Cross, Blue Shield, mortgage companies, and savings and loan companies." She points out that in the basic skills classes she conducts for businesses, many of the employees taking her classes are women with below a third-grade reading level. (Interview) This is not just an inner-city problem: Ross Grossman of Prudential Life in Woodland Hills notes that although Prudential has moved to the suburbs, reading and writing is still "a substantial problem among the available labor pool." (Interview)

The same labor force problem exists in San Francisco and Oakland. Oakland employers report that their number one problem recruiting new workers is illiteracy. The San Francisco Chronicle reports that according to a recent University of California study of the Oakland public school system, employers said that many Oakland high-school graduates "are essentially illiterate and uncertain of how to behave on a job." ("Study calls Oakland Schools Terrible," 6/20/85, p. 17) According to U.C. Berkeley Professor James Guthrie, author of the report, "Those shiny new glass buildings downtown are going to be empty if they don't do something about the schools." (Ibid.)

San Francisco employers report a growing concern over literacy skills of the young adult workforce. According to Bernard Gunther of the San Francisco Private Industry Council, business members of the Council specifically requested a separate JTPA funded program be created to provide only basic skills instruction to JTPA applicants. Gunther says, "They confided to me that they are concerned that potential employees cannot fill out job applications or follow written instructions." (Interview)

This problem is not just an employer problem, but is also an economic development problem for cities. Los Angeles, San

Francisco, and Oakland all face constraints on their development as their literate labor pool runs dry.

2. **Productivity problems.** Employers report the lack of basic skills as a serious productivity problem. One example widely cited by the insurance industry is that 70% of dictated correspondence of a New York insurance company must be redone at least once because of human error (Elfenbein, 1983). 41% of companies in the Center for Public Resources survey report "general productivity" as the primary cost of lack of basic skills (Henry and Raymond, 1983). Other examples cited in the CPR survey include misreading directions, entry of incorrect data, inability to read orders, use of incorrect chemical compounds, and lost time (Ibid.). One employer interviewed in the Literacy 85 report (Winterbauer & Ploetz, 1985) said, "I asked this employee why she had such low productivity and she said, "It takes me longer than the others because I read everything 3 or 4 times to be sure I understand it."

3. **Increased training and re-training costs.** Since a great deal of learning is done on-the-job, limited basic skills will slow the rate and success of integration of new employees. According to Bill Nilsson of Hewlett Packard, an issue that is becoming key for business is the extent to which employees are going to require re-training and how well they can adapt when confronted with new job skills (interview). Re-training costs when new technology is introduced will be much higher, since the learning capacity of employees will be limited by their lack of basic skills. Companies report significant expenditures for basic skills training. For example, AT&T reports spending $6 million a year to train 14,000 current employees in basic reading and mathematics competencies (Henry and Raymond,1983). Two other companies reported that they spent an estimated one quarter of a million dollars each for remedial training of current employees (Ibid.).

4. **Health and safety problems.** Proper health and safety depends on the ability to follow precautionary directions, to read handling instructions for dangerous products, and to be accurate in the operation of equipment. In jobs which might otherwise require few literacy skills, such as cleaning and building maintenance, the inability to read health and safety warnings may cause serious problems. Sticht and Milkulecky (1984) report that concerns regarding the safety of workers who cannot read warnings and follow written directions have been issues in a growing number of court cases and have led to several firings at Westinghouse Electric Corporation's defense gear plant in Sunnyvale, Ca. Winterbauer and Ploetz (1985) quote an employer who said, "Security guards must be able to follow directions, as must ambulance drivers, paramedics, nursing assistants, and many, many others. Failure to read correctly and follow directions in many of these jobs could result in someone's death."

C. The literacy problem as experienced by employees and by individuals in the labor market

In addition to the economic costs of illiteracy to employers, the human costs of unemployment and lack of economic opportunity caused by continued adult illiteracy are substantial. The concern of an individual as it affects participation in the labor market can be defined as follows: what level of literacy skills are necessary, in a given labor market, for satisfactory levels of income and job security in a working lifetime? To measure the population for whom literacy is a problem, we would need to know: who are the individuals whose basic skills are too low to provide a reasonable chance, under current economic expectations, of a satisfactory working lifetime?

There is a strong relationship between lack of economic opportunity, unemployment and illiteracy, particularly for minorities. Renee Lerch of the National Adult Literacy Project has estimated that 36% of unemployed individuals are functionally illiterate (interview). According to the National Commission on Excellence in Education (1983), 13% of all 17 year olds were found to be functionally illiterate. Among minority youth, functional illiteracy approached 40%, while unemployment rates reach as high as 48% for black youth (Ibid.). An estimated 850,000 high school drop-outs join the pool of persons considered functionally illiterate each year. (Ibid.) According to Dr. Lynda Smith in the Department of Education, in California, 23% of all tenth grade students do not graduate from high school. Even when they do, they may not have the necessary skills. For example, the San Francisco Chronicle reports that the U.C. Berkeley study of Oakland schools found that the average competency of high school graduates in Oakland is at the 9th grade level, with many below this level (6/20/85, p. 17). At the levels of current job requirements, thousands of students every year will be unable to secure stable employment throughout their lifetime because of low literacy skills.

The following represents a summary of the ways the illiteracy problem is experienced in the workforce:

1. Unemployed worker or youth entering labor market.

a. Rejection from jobs. People lacking requisite basic skills will be frequently rejected from employment. Winterbauer and Ploetz (1985) report that employers in all companies surveyed rated reading as the most important basic skill for workers in entry-level positions. They cited a government agency's report that of 15-20,000 applications a year, 50% are turned away for lack of basic skills. A utility company reported that 39% of job applicants were turned away from entry-level jobs because of

below standard test scores (Henry and Raymond, 1983). As noted above, groups with high illiteracy levels such as black youth cannot compete for entry-level jobs. Clearly, the ability to enter the labor market is extremely difficult without literacy skills.

Even where skill levels may be otherwise satisfactory, illiterate or semi-literate individuals are likely to be rejected. Employers report the use of a screening process for literacy skills which can lead to rejection of otherwise qualified employees for tasks which may require manual skills, not reading and math. According to Linda Stoker of Polaroid, many employers are inflating the criteria for being accepted for a particular job, asking for education or skills not necessarily required for the immediate job being sought (interview).

Similarly, the inability to fill out an application will also disqualify workers from jobs for which they may be capable or qualified. In many cases, workers find a family member to fill out the application, and learn to cope with their limitations on the job. In addition, the lack of test-taking skills will also screen out potential semi-literate workers.

b. Rejection from entering job training or apprenticeship programs. Another significant aspect of the problem for illiterate adults is that, in many cases, job training programs will not even accept potential trainees who do not have requisite levels of basic skills. Vocational programs funded under the Job Training Partnership Act (JTPA) are most oriented towards rapid job placement. This criteria frequently screens out potential applicants who do not have the necessary literacy or test-taking skills.

No systematic statewide data exists on the number of rejections from job-training programs for lack of basic skills, but literacy programs and job-training programs report the problem as significant. For a microcomputer repair course offered to inner-city youth in San Francisco, 60% could not reach the 8th grade skill level necessary to qualify. In a Richmond JTPA program, 40% of adults were reported not to qualify for job training because of lack of literacy skills which required 6th-8th grade skill level. Generally, training programs report 6th to 8th grade cut-offs which cannot be met by many applicants.

One particular skill deficiency which leads to rejection is the inability to take tests. Test-taking skills were often cited as a necessary part of literacy training as it relates to job-training programs.

c. A limited range of jobs to choose from. While there are labor shortages in certain types of skilled technical jobs, semi-literate adults will not qualify for them. More likely, the

range of jobs available will be secondary labor market jobs, with little stability, few benefits, and low wages. Without literacy and improved skill levels, the expectation will be of repeated unemployment and poverty-level wages. Most job descriptions report reading skills as necessary to qualify. For example, in an Alameda County report on job requirements, only kitchen helper and dining room attendant did not report literacy requirements (McLaughlin, 1984-85).

Interestingly, successful job training may not provide a lasting solution, even where people are being trained for jobs which exist. Phil Batista of the Alameda County Training and Employment Board (ACTEB) reports the problem of training people for jobs such as electronics assembly which, while currently available, may be obsolete in several years (interview). Once again, the cycle of displacement will occur if the workers cannot read enough to adapt next time to changes in the workplace.

2. Current employees who lack basic skills.

Many workers who are currently working in stable jobs may experience serious employment-related problems from lack of literacy skills, despite their apparent current success in the labor market. Mass production manufacturing industries in particular have in the past relied on a substantial number of blue-collar skilled and semi-skilled workers who have not used or needed literacy skills in their jobs. These jobs may be unionized, with benefits, protections, and high wages, but are threatened by economic change.

A significant number of blue-collar workers appear likely to have low levels of basic skills, in part because they have atrophied from non-use. Ben Munger, a legislative consultant who has followed numerous plant closures, notes that hiring procedures in large plants for many years had no screening for literacy skills, nor any reason to do such screening for semi-skilled jobs, and that the skill deficiencies of such workers, because of their relatively high and stable incomes, were invisible for a long time (interview). According to Linda Stoker of Polaroid, many manufacturing jobs were designed to do simple tasks and provided an active disincentive not to learn on the job. For workers in their 40's and 50's who filled these jobs, they cannot find alternative employment in new industries because they lack the educational background to compete in the new labor market (interview).

Problems resulting from lack of literacy skills for current employees appear as follows:

a. Plant closures. Insofar as these workers are in mass-production industries which are declining--e.g. autos, heavy

equipment, steel, rubber--they face a substantial risk of plant closure. In plant closure situations, the employee will be required to seek re-training for a new job, and his/her lack of literacy skills will be a substantial barrier to re-employment, particularly at a level commensurate with previous work.

This problem surfaced strongly at the General Motors Fremont plant, where workers desired to be trained for new employment (e.g. robotics) with basic skills which were eventually identified as below sixth grade. At the closing of U.S. Steel in Pittsburg, at the Firestone Plant in L.A., at Caterpillar in San Leandro--in fact, in nearly every blue collar plant closure described to us--basic skill levels of many workers were too low for immediate re-training. Prior to the closing of the Ford Milpitas plant, testing was done which identified nearly 100 workers at 5th grade level or below.

The problem appears to have been identified once programs were put in place specifically directed at displaced workers. Where plant closures took place prior to the existence of targeted services, the lack of basic skills was not identified.

b. **Technological change.** Short of plant closure and layoffs, the basic skills-deficient worker will encounter serious problems with technological change. Job descriptions and responsibilities may change, requiring extensive re-training which not only involves the ability to learn but also the on-going ability to work with information as a condition of the job. For example, Phil Batista of ACTEB referred to machinists who were highly-skilled but semi-literate (interview). As machine shops have shifted to numerically- controlled machine tools, the skill requirements have shifted to computer operation involving literacy skills, which has caused severe adaptation problems for some trained machinists.

c. **Promotion and upgrading.** Workers performing satisfactorily in a particular job may have to reject a promotion which involves using written material. In some cases, workers leave their current jobs, or are fired, because the promotion exposes their lack of literacy skills; Alice Bouren of California Literacy, Inc. reports that many employees in industry cannot take promotions because they lack basic skills and they are in fear of losing their jobs (interview). In other cases, the worker is forced to reject the opportunity to advance. According to Sharon Crater of the Adult Learning Center, a couple were both offered promotions within their company and both quit because they did not want their employers to know they could not read (interview).

The CPR employer survey cites various examples of promotion problems. "Over 65% of responding companies note that basic skill deficiencies limit the job advancement of their high school

graduate employees, and 73% responded that deficiencies inhibit the advancement of non-graduates." (Henry and Raymond, 1983) This is a problem for employee morale as well as employer adaptability. Lilli Cumming of the Humboldt Literacy Project reports that many adults who come into her program do not want to admit they cannot read or write to their employers (interview). Pat Osbey of the Kern County Library described the case of a career Air Force man who was offered a promotion and turned to the library program because his reading skills were deficient and he did not want anyone in the military to know (interview).

These examples were cited by library literacy programs from which an employee sought help, as well as in business surveys and in Kozol. They appear to occur where an employee has learned to successfully hide his/her deficiencies and otherwise performs well. Alice Bouren described one man who had worked himself up to foreman, despite his reading deficiencies. To perform his job, he would take his paperwork home every night for his wife to do (interview). These types of problems do not lend themselves to easy identification because of the hidden nature of the problem.

3. Employees in marginal jobs.

It is useful to distinguish between the effects of semi-literacy on established, 'primary' labor market employees, and those in the 'secondary' workforce. These secondary market jobs are generally characterized by insecurity of tenure, low wages, few benefits, and few long-term opportunities. Employees in the 'secondary' labor market may be capable of performing a range of jobs without literacy skills, including food service, janitorial and maintenance, hotel, farm labor, light industrial (e.g. cannery, sewing, electronics assembly), and day labor. Without literacy skills, these employees, who are disproportionately women and minorities, will be unable to escape cycles of poverty-level wages and recurring unemployment.

The problems described above: displacement from plant closures; inability to upgrade; inability to adapt to technological change, and inability to find work, will be similar to the established worker, but more severe because of the history of poverty level wages and the lack of an established skill level or work record.

Some recent studies have argued that this labor market may be growing, and that the workforce is becoming more polarized. However, as noted in the following section, job descriptions for all but the lowest level jobs consistently require literacy skills, in some cases substantial ones. Access to all but the lowest levels of the labor market will be increasingly difficult without literacy skills.

D. The Economic Context: Changing technology and changing jobs

The extent to which illiteracy is an economic and employment problem is to a great extent a function of the nature of the economy. 19th-century farming or early 20th century assembly-line work may not have required reading, writing or math; in late 20th-century California, it is hard to survive without those skills.

But it is not just for individuals that these skills are important. For the health of the economy, an extensive upgrading of basic skills is a primary requirement for adaptation to the new information economy. In California in particular, the ability of the population to learn and adapt will be crucial to meeting the economic challenges of the rest of this century.

A large number of recent discussions have focused on the growth of the information economy (Hayes, 1985). The widespread use of computer-technology in manufacturing and services, as well as the growth of competitive mass-production in the developing world, have led to a growing understanding that the strength of the U.S. economy will be largely dependent on our ability to apply newly-developed information to a range of processes and services.

Often these views have been expressed in discussions of the relative role of the information-service sector, which, according to the American Council of Life Insurance, employs 60% of the workforce (Elfenbein, 1983). However, two recent works give a framework which is appropriate to the California manufacturing economy. Both Robert Reich, in The Next American Frontier, and Michael Piore and Charles Sabel, in The Second Industrial Divide, argue that American workers will no longer be sustained by jobs in mass production industries. For a generation, many workers had long-term, well-paying, unionized jobs which required the ability to perform similar or the same tasks on a day-to-day basis. Roles in the hierarchy of the workplace and corporation were well-defined, and skill levels needed only to be appropriate to predictable and relatively routine tasks.

In the last 20 years, stable mass production jobs have been lost to both technological change and worldwide competition. Automation has replaced the need for semi-skilled workers in many mass production industries. Johnson (1985) quotes the personnel head for General Motors: "In 1981 we have five unskilled workers for every technically-trained worker. Within 15 years the ratio will be one-to-one." The transfer of mass production technology has meant that workers in developing countries could be nearly as productive as U.S. workers, at significantly lower wages. The revival of Europe, Japan, and the developing world meant that the

U.S. has had to seeks its strengths--its comparative advantage--elsewhere.

Those strengths, particularly in California, appear to lie in the ability of industries to be flexible, innovative and adaptible, based on entrepreneurial skills and technically trained workers. Reich calls this 'flexible system' production; Piore and Sabel call it 'flexible specialization'. As Reich notes:

> The industries in which the United States can retain a competitive edge will be based not on huge volume and standardization, but on producing relatively small batches of more specialized, higher-valued products--goods that are precision-engineered, that are custom-tailored to serve individual markets, or that embody rapidly evolving technologies.

This system is not only appropriate to new industries. Rather, specialty steel, custom chemicals and other specialized parts of traditional manufacturing are becoming increasingly important, with the routine mass production base of these industries shifting abroad.

According to Reich, the success of the flexible system depends primarily on the skills of the employees. The required skill levels call for constant processing of new information, the performance of complex tasks, and continued on-the-job learning. Piore and Sabel refer to "the combination of a formal education, manual skills, and practical experience that is ideal for the creation of dynamic flexible enterprises." Reich notes:

> If the problems and opportunities could be anticipated and covered by preset rules and instructions, the production process could be moved abroad... Unskilled or semi-skilled workers know how to follow simple rules; but they are seldom accustomed to exercising discretion or accepting responsibiltiy as members of a team, and <u>they may not have developed the basic verbal and mathematical skills that are prerequisites to team learning.</u>" (emphasis added)

Recent U.S. Dept. of Labor studies indicate a general trend towards an increase in the level of skills and education required of employees in a wide variety of American industries. The cause of this trend can be attributed largely to advances in technology as well as efforts to maximize production efficiency and reduce labor costs. Such industries as coal mining, trucking, and concrete--industries which previously relied heavily on unskilled and semi-skilled workers--report major changes requiring greatly increased skills for employees. Computerization has radically transformed the printing industry which, ten years ago, relied heavily on manual labor for many stages of its operations.

Similar trends have been reported by in-depth studies in bakery products, air transportation, telephone communications, insurance, oil and gas extraction, petroleum refining, and fabricated structural metal. These industries report increased use of computers, an increase in reliance on numerically-controlled machines, and the use of manuals for machine handling. (Bureau of Labor Statistics, 1979 and 1983)

A study by Diehl and Mikulecky (1980) found that 70% of the reading material encountered in a cross-section of occupational settings is between the 9th and 12th grade level in difficulty, and that 15% is above that. Only 2% of occupations surveyed required no reading or writing at all. For military manuals in the Air Force, Army and Navy, Sticht reported readibility levels in the 10th to 13th grade range (Sticht and Mikulecky, 1984). This trend towards an increase in literacy skill requirements for many jobs is likely to continue or even accelerate in the future.

One result of these changes has been a serious job/skills mismatch, as noted earlier. There are over one million unfilled skilled jobs nationwide, with shortages, for example, for machinists and tool and die makers expected to grow worse. In particular labor markets such as San Francisco, which are heavily dependent on finance and business services, semi-literate adults cannot qualify for jobs which are available. Bruce Franks of Potrero Hill Community Development Corporation says that business wants a higher level of skills from the workforce. "As the labor market becomes less manufacturing and more white collar, my clients who are enrolled in this program are becoming less and less able to compete." (Interview) In Alameda County, which reports more diversity in the growth of its economic base, nearly every job for which it projects continued demand--including relatively low-level service jobs--requires reading and math skills, according to the county's occupational outlook table (McLaughlin, 1984).

For the California economy as a whole, projections of employment for 1980 to 1990 show a gradual decline of blue collar occupations in heavy industry, construction, amd mining, while finance, insurance, real estate and service sectors are expected to increase. With regard to job growth, most of the jobs which are expected to account for the largest numbers of new jobs, such as secretaries, sales and office clerks, teachers, janitors, and cashiers--the top five--require literacy skills.

Job descriptions for even those jobs where low levels of literacy might be expected demonstrate this need. Janitors, for example, "must be able to read and follow instructions", and should have knowledge of cleaning chemicals. Warehouse workers must be "able to read and write English. Follow verbal and written instructions. Do simple arithmetic." For only a few positions, such as

kitchen helpers,guards and doorkeepers, literacy skills are not explicitly required. Those few jobs report keen competition for employment (McLaughlin, 1984).

Even where people can get the few, limited low-literacy jobs available, the success of the economy will be based on high productivity work. California's economy has been based on its innovation and the skills of its workforce, which now have to be tapped more extensively than ever before. As Reich notes, "...among the millions of Americans now locked into dead-end jobs, there are vast numbers whose latent talents and untapped capacities for learning could be put to far more productive uses."

Ultimately, for employer, employee, and the economy as a whole, the problem caused by the lack of literacy skills can be generalized as the inability to adapt to the constant change which a fast-moving economy requires. Employees are, more than ever before, required to change jobs and careers more than once during the course of a lifetime; the historic expectation of a stable job appears to be a casualty of rapid economic change. For employers, technological change requires constant up-grading of the skills of the workforce and application of new information to production processes. For the economy, the pressures of the international economy require the ability to continually adapt.

Over time, the primary requirement for the ability to change is the continual ability to learn. In turn, the ability to learn is a very strong function of the ability to read.

II. Current Literacy Delivery System as it Relates to Employment and Job Training.

The above discussion has focused on illiteracy as an economic problem and on its various manifestations in employment. As indicated, changing economic demands present a substantial challenge for upgrading literacy skills throughout the workforce. This section reports on current efforts to provide basic skills instruction to adults relative to employment and job training. We note, however, that the following discussion is not a complete survey of all literacy service providers. For purposes of this report, we have focused on those programs which relate directly to employment and job training. We also note, that although the literacy needs of non-English speaking adults in California are a concern of any program dealing with basic skills, we have focused primarily on the literacy needs of English-speaking adults because most library programs are serving this population.

Our research efforts, based on telephone surveys and interviews with representatives from ABE, JTPA-funded programs, social service agencies, unions and employers indicate that gaps exist in the delivery of services to adults who need basic skills training. We have found that there is a general lack of awareness and/or reluctance on both sides of the labor/management fence to comprehensively address literacy needs of adult workers. In the following discussion, we review selected literacy programs, and employer and labor efforts, as they relate to the workforce. We also refer to those characteristics which limit these efforts in responding to the literacy needs of California's adult population.

A. Status of Current Efforts

1. Adult Basic Education (ABE)

Adult Basic Education, run by the Department of Education through local adult schools, is the primary purveyor of basic skills instruction in California. ABE has a significant number of functions, not all of which are directly related to basic literacy skills. ABE provides most of the instruction in English as a Second Language (ESL) to non-English speaking California adults; prepares youth and adults for the General Equivalency Diploma (GED); and provides basic skills education so that people can qualify for GED or for job-training programs.

California's ABE is limited in its ability to serve all adults requiring basic skills instruction because of inadequate funding, the structure of its programs, and the many demands made upon it. Within those constraints, ABE is currently providing literacy services to large numbers of California adults. However, many adults with the need for literacy skills are not currently being

served by ABE for the following reasons:

a. ABE is not generally serving adults who have below a 6th grade reading level. According to Margaret Robinson of Far West Labs, ABE is not serving economically disadvantaged adult illiterates: "ABE has written off the hard-core illiterate. It is the community-based organizations and libraries that are reaching out to these adults." (Interview) Dick Stiles in the Department of Education says that most ABE classes tend to focus on GED preparation. "ABE does not serve adults who are below a 6th grade reading level. Our biggest success is with those adults who dropped out at the 10th grade level. They are more likely to take the GED." Stiles says that those adults who are below a sixth grade level are harder to get into an ABE program, and once in, they have a higher drop-out rate. (Interview)

b. Currently ABE appears to be directed more towards providing English as a Second Language (ESL) instruction than basic skills classes for illiterate adults. Don McCune of the Department of Education notes that ABE is now primarily serving the ESL population. (Interview) In 1983-84, ABE elementary basic skills classes comprised only 20% of the federally-funded classes serving illiterate adults. The remaining 80% of the classes were ESL.

c. ABE is limited in attracting the semi-literate or illiterate adult by its reliance upon traditional methods of instruction. Many adults are reluctant to return to a structured classroom setting. They often require more individualized instruction as well as a learning relationship which is not threatening or humiliating. For adults who may have experienced failure in school, a return to the classroom may in itself be an obstacle to learning. According to Carlos Bataro of the National City Public Library, "When you put people into classes or impose a set routine on them, the retention rate will not be as high. If you are an adult in a classroom, you don't want to feel talked down to." (Interview)

2. Job Training Partnership Act (JTPA)

The Job Training Partnership Act is the primary source of job-training funding for unemployed, the economically disadvantaged, and youth in California. It provides for direct job skills training, upgrades basic skills for youth, provides for re-training for displaced workers, and provides for educational and support services for its participants. The funds are allocated to 50 local Service Delivery Areas (SDA's), administered by Private Industry Councils (PIC's) which consist of members of the local business community and service, training, and educational providers. The PIC's contract with a range of public and private organizations to deliver direct training and services to their target populations. These organizations are

widely disparate, including community colleges, private training schools, non-profit employment training centers, and community-based organizations.

JTPA programs provide basic skills training in several ways. They contract on a performance basis to upgrade the educational competencies of youth, ages 16-22. When skill deficiencies are identified among displaced workers, they contract with ABE or other educational programs to provide basic skills instruction. Many of their job training programs also provide basic skills instruction as part of their direct job training programs. Summer youth employment programs also often include basic skills training for participants.

However, JTPA is limited in its ability to address the basic skills needs of youth and adults seeking job training for the following reasons:

a. The incentive structure of the JTPA system may provide a major barrier to serving the semi-literate adult. JTPA-funded programs operate on a performance basis which is tied to the number of youth and adults they can place in jobs or community colleges. The requirement of job placements has severely limited JTPA's ability to serve adults with severe basic skills needs. According to Kathy Sage of the state JTPA office, their main focus is to provide adults with the skills necessary to become employable. Those clients who cannot cope with the pre-tests or do not have the basic skills to complete a program frequently are not admitted. (Interview)

b. JTPA programs are not currently designed to reach out to adults below a 3rd grade reading level, and far more often require a 6th grade level or above for the vocational training which makes up the majority of the programs. According to a report by the San Francisco Private Industry Council, which administers JTPA funds, hundreds of unemployed youth tested in 1982 fell below the minimum required reading levels for either vocational skills training programs or study for the GED. ("Foundation's Basic Skills Class", 1983)

> The training programs generally set a minimum of at least 6th grade proficiency. For example, at the low end, Young Community Developers, a vocational clerical training program required 6th grade level. John O'Connell Auto Technology and Welding requires 8th grade reading, writing and math. Youth for Service, the International Telephone and Telegraph telephone interconnect training program, requires 8th grade reading and grammar and 12th grade math proficiency. Admission to the Potrero Hill Community Development Corporation Bank Teller program requires GED or high school diploma and demonstrated 9th grade level skills.

> Youth who do not have these skills find that very little is available to them. (Ibid., p. 1)

The report also noted that the courses for study for the GED required a minimum of approximately 6th grade independent reading level.

c. JTPA programs are required to place individuals into jobs within a limited time frame. Patrick Boyle of the Contra Costa County Private Industry Council notes that under CETA, money was available to meet general literacy needs without having a job at the end of the training program. "Basic skills training can be done within a JTPA program, but the problem is that JTPA is mandated to make our clients employable within a year." (Interview) Bruce Franks, of the Portrero Hill Community Development Corporation, says that because his program's goal is to mainstream their clients into the job market, he can only enlist those adults who he believes can finish the program. "High risk" adults, persons with a long history of unemployment who require considerable support services, cannot be addressed by JTPA-funded programs. (Interview)

Adult illiterates are often motivated to enroll in a training program if they believe it will increase the possibility of finding a job. However, because they lack the basic skills, programs such as JTPA generally cannot accomodate them. Roben Sellers of the Golden Sierra Job Training Agency says that his program offers no literacy training. "I see an identified need to do basic skills upgrading but our focus is solely occupational skills training. When someone comes in who lacks reading and writing skills, we send them to ABE. The problem is that those who come to my agency are specifically looking for a job. They are not looking to go back to school. I don't know if they ever make it to ABE." (Interview)

3. Public library literacy programs

For the last two years, the California State Library has developed 46 literacy programs for adults offering individualized instruction in reading and writing. These programs have developed networks of trained tutors, have done community outreach to attract participants to connect with these tutors, and have begun the process of raising community awareness of local literacy needs. The evaluation of these programs has described them as extremely effective after only a short period of operation (Lane, 1984).

With regard to employment and job training, we have identified the following limitations which currently hinder the ability of the library programs to meet the literacy needs of adults looking for jobs:

a. The reliance on one-on-one tutorial instruction limits the ability of library literacy programs to meet the more intensive basic skills needs of job-seekers and adults trying to qualify for training programs. Students in need of immediate and rapid skills upgrading will not be served by a program with individual tutors working for only several hours a week. According to Sharon Pastori of the Richmond Public Library, "We cannot yet give those adults who want a quick fix the daily intensive tutoring they need to get them into job training programs." (Interview)

b. Many of the programs rely on volunteers for their instruction, and as a result may not be eligible for contracts with job training programs which may require paid instructors. The job training programs, as well as potential contracts from the private sector, may require certain performance criteria which cannot be met by or imposed upon volunteers.

c. The programs are not currently set up to be job-related. For example, one skill which is needed for jobs and for training programs is the ability to take tests, which is not generally a focus for instruction in the library programs. In addition, instructional material in the library programs is not designed to be related to the job needs of adult learners.

d. Linkages have often not been made by the literacy projects in the labor market with employers, unions, and job-training programs. The libraries have valuable services and expertise--e.g., the ability to train tutors, the availability of instructional materials--which have not been widely shared with the employment sector.

None of these limitations should be surprising, since the library programs were not conceived or established to be employment-related. We cite them as background to the policy recommendations which are contained in section III.

4. Welfare Employment Programs

We have found that literacy considerations are not a factor in determining eligibility or participation for employment programs which are part of the welfare system.

a. The Work Incentive Program (WIN). While the Work Incentive Program (WIN) requires all eligible recipients--those with children over 6--to register for employment programs, it only provides job-related services for a small proportion of registrants who are easily trainable and already literate. For example, WIN in Alameda County provides service only to those with a high school diploma.

b. Employment Preparation Programs (EPP). According to

Forrest Boomer of EDD, in EPP and Job Search programs, no screening whatsoever is done for literacy skills. (Interview) The Humboldt County library literacy project recognized this problem in a proposal for literacy training for Job Search Workshops. (Cumming, 1982) This proposal was based on the failure of these workshops to recognize the difficulty of serving semi-literate job seekers who, among other problems, could not fill out job applications.

5. Workplace Efforts

Within the workplace, we have found little recognition of literacy needs of adult workers by California labor unions or employers. While some efforts to address literacy needs have begun, as noted below, for the most part these efforts have been limited to a particular plant or business and have not led to any general recognition of the illiteracy problem in the workplace.

a. Unions

For the most part, California unions have not developed an "in house" response to basic skills training for their membership until a crisis occurs, such as layoffs or plant closures. Danny Beagle, an official in the International Longshore and Warehouse Union (ILWU), while noting that some of the membership could benefit from basic skills up-grading, noted, "Our strongest area of concern is where plants are likely to close and where people are going to be laid off." (Interview)

There are two problems which we have been able to identify which prevent unions from addressing basic skills needs:

1. One major problem is the stigma of identification. Dr. Rosemary Parks, Associate Professor of Education at the University of Minnesota, pointed out that, "No union wants to admit that some of their membership cannot read or write." She notes, however, that unions are having to face the need for basic skills training for their membership as the job market changes. In surveys she conducted amongst the AFL-CIO membership in Minnesota, 30-40% of the workers surveyed indicated that they needed to upgrade their basic skills. Many of the workers who responded had been out of the classroom for 20-30 years. (Interview) Elaine Katz, with the Caterpillar Displaced Workers Project in San Leandro adds, "There is a definite stigma attached to not being able to read and write in the workplace. It must first be safe for workers to come out about their need for basic skills upgrading." (Interview) Lee Shore, also with the Caterpillar Project, noted that only after relatively extensive counselling with workers does this problem reveal itself. (Interview) It is partially because of this stigma associated with illiteracy that unions have generally not pursued the possibility of engaging in literacy training programs on their own.

2. Another problem is a general lack of awareness that literacy may even be a problem among union membership. Elaine Katz says that although the International Association of Machinists recognized the need to provide some kind of job retraining for displaced workers following the Caterpillar plant closure, they did not realize that their membership might not be elligible for the JTPA vocational programs because their literacy skills were too low. This was also the case at General Motors in 1982-83, when 10,000 workers were laid off from assembly plants in Fremont and South Gate. The UAW and GM attempted to engage in retraining for the displaced workers, but they had no sense that basic skills training had to be a component of the program. According to Mike Reilley of the State Adult Vocational Education program, "The UAW had no understanding of the reading levels of their membership, so you had guys with a third grade reading level who wanted to go into robotics. " (Interview) According to Tom Bauer of Adult Alternative Ed., "In our initial discussions with GM and the UAW, both parties opposed classes devoted entirely to brushing up on the basics." (Interview)

b. Employers

The response from management to literacy needs of current and potential employees differs according to industry. We have found that in businesses such as insurance, health care and banking, which rely heavily upon a large clerical workforce, some efforts have been made to provide remedial training. However, in most other industries in California, there seems to be little if any awareness of the problems posed by an illiterate or semi-literate workforce. Limitations on employers' responses to the literacy needs of employees include the following:

1. There is a general lack of awareness by management that literacy is a problem until an employee is promoted or there is a crisis. According to Greta Ploetz of the Minnesota-based Literacy 85, "Adult functional illiteracy is carefully hidden in the workplace. Once employers are made aware that lack of basic skills is a real problem, they can see a connection between lack of literacy skills and productivity. They are just not sure how to document it." (Interview) Linda Stoker of Polaroid says that, "Managers see workers dealing intelligently with their jobs on a daily basis. They equate smartness with literacy, so they don't perceive a literacy problem until someone gets a promotion or a plant closes down." (Interview)

2. Even where personnel directors are aware of literacy problems among employees, higher levels of management still need to be convinced that there is a problem and that they need to deal with it. Personnel directors interviewed by Ploetz and Winterbauer (1985) said there was a lack of commitment on the part of management, who were not involved in hiring or training,

to recognize literacy as a problem. Personnel directors were also restricted in how much assessment could be done in ascertaining employees reading and writing abilities because management was concerned about the legal ramifications of such testing. According to Ploetz, "Managers said that any kind of testing may mean trouble in the form of discrimination lawsuits." Betty Bivens of WRITE Inc., says that there is always someone in personnel who knows there is a literacy problem amongst employees. "There is an enormous need for literacy training on every level in business. The problem is selling management on the problem." (Interview)

Despite efforts by groups such as the Business Council for Effective Literacy or the Association for Adult and Continuing Education to promote and assess private sector involvement, very little information appears to exist on business initiatives in California, except in plant closure situations. One exception to this is the insurance industry in Los Angeles, which has responded to the particular problems of the L.A. labor market.

The insurance industry in L.A. has made a concerted effort to upgrade the literacy skills of their employees. The leader in this field, TransAmerica Occidental, implemented a basic writing skills class in 1982 when members of the Board of Directors found they were receiving letters filled with errors. TransAmerica is located in the inner city and draws upon a primarily black and Hispanic workforce. Rather than fire current employees and be faced with similar problems with its new employees, TransAmerica decided to invest in remedial training classes. TransAmerica also recognized that lack of basic skills was interfering with their employees chances for promotion. TransAmerica contracted with WRITE, Inc. to develop a writing skills program that would be conducted on-site on company time. (Because many of the employees are women with families, they could not have attended ABE classes at night after work and on-site training was necessary.) Terry Orsini, Management Consultant of Organizational Development at TransAmerica, says that employees did not feel threatened by participating in the classes because at TransAmerica, training is perceived as a perk. "It is more effective to offer basic skills classes to current employees than it is to fire them," notes Orsini. TransAmerica now has a larger pool of qualified employees from which to promote, a stronger corporate culture identification and a more uniform quality level in worker output. (Interview)

B. Examples of Combined Efforts

During the course of our survey, we have encountered a number of cases where combined efforts have led to a more comprehensive approach to meeting the literacy needs of both employed and unemployed adults. We have found that when ABE, JTPA, programs implemented in the private sector and literacy programs, such as

those offered by the libraries, are combined, they can effectively complement each other in providing basic skills training that leads to employment. Semi-literate and illiterate adults may be more motivated to enroll in and complete a basic skills program when those programs directly relate to a job.

One approach suggests the use of educational materials which combine basic skills and job-training. In San Diego, Dr. Thomas Sticht, Director of Applied Behavior and Cognitive Studies, is developing instructional material which links basic skills education with vocational training in electronics. Sticht's approach, which he terms "Functional Instruction", is similar to the functional literacy approach advocated by UNESCO. Sticht is working with ABE, JTPA and the military in devising literacy materials that are based on specific informational requirements for electronics jobs. (Interview)

1. ABE/JTPA

A similar approach has been developed by Joe Cooney, the Director of Vocational Education and Special Projects in San Mateo. Cooney takes individuals who fail to pass tests for admittance into JTPA-funded vocational training programs, and cycles them into basic skills brush-up centers which provide four and a half weeks of intensive math, reading and writing instruction. This instruction is based on the skills the individual requires for competency in the specific job they desire. Individual counseling, assessment and social service support are also included. Cooney says, "I wanted to develop a literacy program that would make sense to adults in terms of their life goals. Many adults see the road to reading as being long and vague. I want them to see the connection between literacy and employment." (Interview)

2. Library and JTPA; Library/ABE/Private Sector

In at least two of the library literacy programs, unique coalitions have emerged to meet the literacy needs of the library's respective communities. In these cases, the resources of the library have directly augmented those of ABE, JTPA and the private sector.

Sharon Pastori's literacy program at the Richmond Public Library works closely with JTPA programs in Richmond. According to Pastori, 40% of the adults tested by JTPA fail to qualify for their job training programs. Many other adults require intensive tutoring and classes in test-taking skills in order to qualify for the vocational training programs. As ABE has only 10 slots available to JTPA clients, the library has become a first step for many adults referred by JTPA who later go on to ABE or are admitted to job training. Pastori says the library literacy program is less threatening than the large class setting of ABE and is better able to focus on individual literacy needs of

adults trying to become eligible for job training. "We can help them with their reading and writing, but the significant contribution we make is to boost their self-confidence." (Interview)

The Los Angeles Public Library literacy program has established a close working relionship with ABE. Suzanne Johnson, the director, says that adults need to have at least a 7th grade reading level in order to successfully participate in the ABE classes. ABE directly refers adults to her program who have reading and writing levels below sixth grade and require individualized tutoring before they are eligible to enroll in an ABE class. (Interview)

Johnson has also provided literacy tutoring for the private sector. "The Director of Personnel at Gillette Papermate has been very supportive of employees participating in the library program," Johnson says. "In one case, one of their employees had to refuse a promotion because he had inadequate reading and writing skills. So, personnel sent him to us." Johnson believes the library could effectively provide the expertise and training to businesses interested in establishing in-house literacy programs.

Other library programs also make connections and take referrals from job-training. The Oakland public library program receives students who are training for the growing hotel and convention sector, who do not have the requisite literacy skills. Other programs report connecting with job-training programs and with employers.

3. <u>Labor/Management/JTPA and ABE - Plant Closures</u>

Where the private sector, JTPA and ABE have combined resources in addressing the problems created in plant closures, more effective and comprehensive programs have been created to meet not only the retraining needs of displaced workers, but also their literacy needs. Two such cases involved in one case the resources of ABE, JTPA, Ford and the UAW, and, in the other case, the resources of ABE, JTPA and Levi Strauss. Both shared similar beginnings. In each situation, the vocational retraining aspect was initially emphasized as the primary component, until assessment was done of the displaced workers. Then, it became apparent that job training could not proceed alone without basic skills instruction.

a. Ford/UAW

At Ford, the Milpitas Adult School was brought into the Ford plant in 1983, prior to closure. Following extensive testing, ABE discovered that nearly 1200 employees scored below the 12th grade reading level, with the greatest percentage scoring between 7th and 11th grade. 770 workers required basic skills instruc-

tion before they could participate in the Vocational Retraining Program. Of those 770 workers, 90 adults had reading and writing levels at grades 2-5 and another 89 workers required ESL instruction. 546 of the 770 displaced workers completed the basic skills component and became eligible for Vocational Retraining classes. Another 175 workers successfully passed the GED.

According to Rich Barbier, Adult Education Coordinator for Milpitas Adult School, several factors made this a successful collaboration. First, "The displaced workers probably would not have revealed their lack of basic skills if Ford had not been so supportive of the program. Ford treated the workers like a family." Second, the cooperation between Ford and the UAW made early assessment of employees' literacy and vocational needs possible. Third, all testing and training of employees was done right at the Ford plant. Barbier says, "If the displaced workers had had to travel to another location, less than half of them would have participated." Fourth, vocational training was provided in fields where the likelihood of finding employment was high, such as electronics, clerical and microwave assembly. (Interview)

b. Levi Strauss

In the case of Levi Strauss, which closed its San Jose plant in August, 1984, the same kind of support was evidenced by management in providing a comprehensive retraining program for its employees. In cooperation with the JTPA program, 264 employees being laid off were tested for vocational and literacy skills. The program discovered that the majority of displaced workers could barely speak any English and were not literate in their own language. According to Linsey Fonick of the Santa Clara Employment and Training Program, which is the administering agency for JTPA funds in Santa Clara County, "Many of the employees had no incentive to learn English in their jobs, despite having worked at Levi Strauss for over 20 years. Their line supervisors could speak Spanish or Portugese and the tasks the workers performed, such as sewing, production work and loading boxes, did not require English skills." (Interview) 130 employees eventually went through the retraining program, with over two-thirds requiring extensive ESL before they could participate in the key-punch, machinist, clerical or electro-mechanical assembly training programs.

All the retraining and basic skills classes took place outside of the plant at San Jose City College, the Center for Employment & Training in San Jose, and at two other locations. Fonick said that those displaced workers who already had some basic English skills were able to successfully combine basic skills with electro-mechanical assembly training. Participants were instructed in job skills while learning the vocabulary they would need to perform the job, similar to the approach advocated

by Sticht. Although the language needs of the displaced workers were more severe than Levi Strauss anticipated, Fonick says that the company's financial support and commitment to their employees made the retraining program possible. Fonick also noted that those employees who chose to go directly into the job re-training program before acquiring basic skills were not successful in finding jobs.

* * *

One of the few examples of combined efforts addressing the needs of illiterate and semi-literate adults that we have discovered among employers and government in California is taking place in Los Angeles. Here, efforts are being undertaken by the L. A. Chamber of Commerce, industry and the Employment and Training Action Council to respond to the growing culturally diverse population that comprises the L.A. labor pool. Dan Fleming of the Employment & Training Action Council organized an economic roundtable to analyze future job growth in L.A. in an attempt to match job creation with the skills levels of the unemployed. He says that a large, functionally illiterate job force in L.A. is a given, and poses a critical problem for the Los Angeles economy. According to Fleming, "It will take the combined efforts of government, industry and community-based organizations, to deal with this semi-literate and illiterate workforce." (Interview)

This combination described by Fleming -- involving government, industry and public service providers -- is the model for the Philadelphia program and for many of the recommendations we describe in Section III. While some of the combined efforts described above do include government, business and literacy providers, political leadership and involvement appears to be a missing ingredient. Despite the President's initiative and the Governor's resolution, there is little outside political awareness of the problem. However, where such political interest is expressed, literacy programs receive a great boost.

Spurred by articles in the January 23, 1983 Philadelphia Enquirer which stated that "more than 40% of all adult Philadelphians are functionally illiterate," the political consciousness of an entire city was mobilized for action. Mayor Wilson Goode, in an effort to combat this serious problem, had lengthy discussions with employers, the unemployed, neighborhood advocates, educators and other politicians. The result was a Mayor's Assault on Illiteracy, including a city-wide commission which employs a full-time staff person within the Mayor's office to coordinate a sustained, large scale campaign. The major goal of the campaign is to serve adults who require basic skills instruction through programs in beginning reading, adult basic education, GED preparation and ESL. One of the first steps of the campaign was to form a coalition of literacy service providers throughout the city.

Dr. Marciene Mattleman, the Mayor's coordinator of the program, notes, "I am the only full-time staff person in any Mayor's office in the country that is focusing on this issue." She further notes that Mayor Goode is one of the first to see the direct link between literacy and the economic well-being of his community. "This city is waging war on illiteracy in order to attract and retain jobs, hold taxes in check, rebuild its neighborhoods and relieve the welfare rolls." (Interview)

The approach of Philadelphia may well be a model for policy. In Cleveland and Atlanta, literacy programs are succesfully working with political leadership to establish major literacy mobilizations. In each of these cases, the connection with the labor market has been a crucial element. In the limited examples we have found in California where partnerships have been developed -- partnerships between business and labor, and between ABE, JTPA, and library programs -- efforts in providing basic skills instruction to adults seems to be more comprehensive. When these kind of coalitions are further combined and coordinated within a political context, perhaps these efforts may be even more effective.

III. Suggested Policies & Strategies for Literacy and Employment

"The problem is there is NO public policy."

--Dr.Donald McCune, Manager of Adult Alternative and Continuation Ed. Services, State of California

The previous sections have defined the nature of the literacy problem as it relates to employment, and have described some of the ways in which the problem is currently being addressed. We have argued that the problem is not just one facing individuals who, because of basic skills and literacy needs, lack economic opportunity. It is also a problem critical to the future health of the California economy. We have also pointed out that, while a certain number of programs have recognized this critical need and are trying to address it, there are substantial gaps in the delivery of services, lack of coordination and referral among those services, and a general lack of awareness in both the public and private sectors.

This section focuses on our recommendations for the role of local literacy projects and the California State Library. It is our hope that these recommendations can serve as guidelines for the development of program and policy which can effectively connect literacy to employment.

First, we believe that there are some general guidelines and considerations for developing policy and programs. The following points can provide a general framework for decision-making about literacy policy:

1. Need for clear state policy recognition of connection between literacy, employment and the California economy.

State policy must recognize the critical link between illiteracy and the productivity of the economy. Such an understanding must be reflected in the full range of policies and programs of the state, particularly those which are oriented towards encouraging the economic development of California. All state and local agencies should be made aware of the problem and of potential actions which they can take to correct it.

2. Need for public recognition and political leadership.

By far the most powerful way to facilitate solutions to the literacy problem is to achieve broad recognition of it by opinion leaders, policy makers, and the public. A strong public focus on literacy will draw out creative solutions and new efforts which will overcome many of the problems which currently handicap literacy programs. We believe that increased resouce

commitments will follow if such leadership and awareness is developed.

3. A pluralistic delivery system.

Any policies to increase the effectiveness of services and broaden the reach of public library literacy programs must recognize the essential pluralism which already exists. ABE, Community Colleges, the library literacy programs, community-based organizations, volunteer literacy groups, job training programs and employers are all currently providing some basic skills training. We suggest, therefore, that the library literacy programs must see themselves as part of a continuum of services in addressing the basic skills needs of unemployed and employed adults.

4. Funding constraints.

Any new policies and programs must recognize the current constraints on new funding which exist at the federal and state level. Although the overall consensus is that more funds are needed to address the problem of adult literacy as it relates to employment (e.g. Kozol calls for a $10 billion federal initiative), our recommendations are based on a recognition that major new public spending initiatives are unlikely at this time. However desirable such new spending may be, there are changes and improvements in policy and program which can occur with relatively limited amounts of new resources. And, as these improvements occur, the support for additional funding will be stronger. We do not intend to deny the need for new funds, but only to provide recommendations in a realistic fiscal context.

5. Planning, coordination and cooperation.

We believe that, given the pluralism of service delivery, one of the most important directions for new policy is to provide for a coherent and coordinated means of securing literacy services and information. We have found that coordination and cooperation among existing literacy, basic skills and job training programs is generally sporadic or non-existent, but where it exists, programs can be very successful. Therefore any policy must plan for a systematic approach which includes coalition-building, networking, information and referral, and the combined use of private and public resources.

6. Data collection, accountability and assessment.

We need more accurate data about the extent and location of the problem in California. Also, any new program must have at its core a method of assessment and accountability. Better data is necessary to provide hard evidence of the extent of the problem, particularly as it affects the workplace and labor

market. Evaluation and assessment is crucial in seeking public and private sources of funding. And if literacy programs are to be linked to performance-based job training programs, there must be a means of tracking the progress of adult learners in order to demonstrate successful performance.

7. Employment focus and its limitations.

The connection between literacy programs and employment provides a means of strengthening current literacy efforts, but it is not the only possible approach. The need for employment is a strong motivation for acquiring literacy skills. Tying literacy services to employment provides an organizational base of employers and labor unions, as well as a potential funding base from job training programs and the private sector. This connection also provides an economic productivity justification for literacy services which broadens the base of support for literacy programs.

However, we recognize the perspective within the literacy community which argues that literacy training need not be employment-based, and that there are many other important motivations for literacy besides its economic justification. While the recommendations that follow utilize employment issues as a starting point, we recognize that this approach is only one among several, and that the need for a broader mobilization for literacy has a number of different bases.

8. Building on current experience.

Our policy recommendations are to a great extent an outgrowth of much of the work which has already been going on in California and elsewhere in the country. We are trying to build on what works, and transmit and consolidate this information. In some cases, we recognize that many of these recommendations are already being attempted; in those cases, their inclusion should be understood as a reaffirmation of the importance of those efforts. We have also tried to put together a framework for policy which gives coherence to these efforts.

Suggested Policies

Given the above considerations, what is the library's role in providing literacy services to adults as they specifically relate to employment and job training?

1. Local Library

The local library literacy programs have tremendous potential to serve as focal points in a continuum of literacy services. Generally, the libraries can strengthen their role in relation to job-training programs, employers, unions, and the unemployed by developing their capability as a center for literacy services, including training of tutors, development of employment-related literacy materials, providing instruction, performing assessment of competency levels in the workplace, and providing information and referral to available services.

We should note that library literacy programs based in urban communities will differ from rural programs, relative to the local availability of other services, access to program and funding sources, and the different nature of the job market. However, both urban and rural based projects can make use of many of the strategies suggested below.

Local library literacy projects can expand their relationship to employment training programs, other providers of basic skills and the private sector by:

A. Contracting for JTPA Funds.

As noted in Section 2, the use of JTPA funds for basic skills training is limited by the incentive structure of the programs which require direct job placements as opposed to basic skills upgrading. At the same time, JTPA programs do contract directly for basic skills training, particularly for youth 16-22 and for displaced workers. These programs are contracted for on the basis of performance of educational competencies, not specific job placements. Usually, JTPA contracts with Adult Basic Education, Community Colleges, and community-based organizations which do basic skills instruction.

The local library programs are not generally organized in such a way as to provide intensive literacy instruction on a group basis, as required by the economics of the JTPA contracts. However, in those cases where other agencies are not providing adequate services, or where the library programs can organize intensive classes, they are currently eligible to seek out JTPA contracts for providing basic skills instruction. In addition to regular JTPA programs, summer youth employment programs also provide basic skills training which the library could success-

fully contract for. The key change which library programs will have to make in order to seek these contracts, will be to develop programs which include intensive, small-group instruction in addition to one-on-one tutorials.

B. Complementing Job-training Programs.

Currently, a number of library programs have established working relationships with JTPA-funded and private job-training programs in their communities. The libraries can complement these programs in a number of ways:

1. **Provide one-on-one tutoring for those needing more individualized attention.** The libraries can offer their tutorial services for those students who are having difficulty staying in JTPA programs for lack of basic skills, so that these participants will not be eliminated from the program.

For Summer Youth Employment programs, the library programs should be particularly well-suited to provide necessary tutorial assistance.

2. **Improve basic skills and test-taking skills of applicants who cannot qualify for the job-training programs.** Library programs should work with JTPA programs to receive direct referrals (as some libraries are already doing) of those individuals who are turned away from JTPA programs for lack of basic skills. The problem here may be that individuals who wish to enter job-training programs rapidly may need more intensive instruction than one-on-one programs can provide. The libraries may also wish to orient some parts of their programs towards JTPA readiness, which includes test-taking skills.

3. **Work with displaced workers on a one-to-one basis to assist their adaptation to job training or new work.** One of the often-cited achievements of the library programs is increasing self-esteem for those adults who have been out of the learning process for many years, a problem which is particularly felt by displaced workers. Tutorial support during a plant closure can provide significant assistance to the rest of the learning process. Displaced worker programs under Title III of JTPA are organized in such a way as to permit approaches which combine a range of services which may include library literacy services.

4. **Assist employers using Employment Training Panel (ETP) funds.** In the ETP program, employers contract for and administer funds which upgrade the skills of their workforce or train unemployed workers. While these programs generally focus on specific job skills, literacy programs can provide basic skills training as requested by employers as a component of overall skill up-grading.

C. Complementing ABE.

As explained in Section II, adults with basic skills needs below a sixth grade level are not currently being served by ABE classes and are frequently unable to function in a traditional classroom environment. In many cases, JTPA programs contract with ABE for those who need basic skills upgrading. Insofar as the goal of our coordinated set of programs is to make sure that people do not get lost in the process of seeking instruction, the library programs should establish strong relationships with ABE to provide tutorial assistance to those who are currently enrolled in ABE and having trouble. Local libraries should also ask ABE for referrals of those adults who are unable to participate in ABE programs. These connections have been made by many of the libraries, and, while they are not directly employment-related, the libraries have the opportunity to tailor their literacy tutorials to the job goals of the individual who is receiving generalized instruction in ABE.

D. Marketing library literacy programs to other public agencies dealing with employment.

In addition to JTPA programs, other public agencies such as the Department of Rehabilitation, Employment Development Department, Department of Social Services, and programs such as Job Corps and California Conservation Corps may need literacy instruction for their clients as a part of their employment-related services. For example, welfare recipients in many counties receive job search assistance and employment preparation programs which, as noted in Section II, do little or no screening for illiteracy. Library programs can add a significant literacy component to these programs, can help these agencies increase their consciousness of the nature of the literacy problem as they design their programs, and can make the clients of these programs more employable.

E. Contracting with Private Sector/Government Employers.

The ability to contract directly with employers can provide a potential new source of funding for the library literacy programs. As the understanding of basic skills problems of the workforce extends to employers, the libraries can play a significant role in assisting personnel departments in identifying the problems and in designing programs to alleviate them. As noted earlier, employers often lack the tools necessary to identify the problem. The libraries can play several roles here, as consultants and/or contractors to employers:

1. Act as a resource and referral program for employers as they seek placement and assistance for their employees.

2. Assess the basic skills needs of the particular employer and

of the basic skills deficiencies of employees.

3. Develop materials for literacy instruction based on the needs of the particular industry or job, particularly for adaptation to technological change or to help with promotions.

4. Provide training to employees, who, as tutors, can assist other employees in on-site programs.

5. Generally, provide consulting services in formulating in-house and referral programs for employers.

F. Providing Literacy Services to Labor Unions.

Labor unions have both an unrecognized need for services and the potential organizational base for substantial literacy programs. In those cases where library employees are union members, they should reach out to their labor councils to make unions aware of the availability of their programs. The libraries can also do the following in relation to unions:

1. Develop awareness of their programs for union activists, who can refer members as needed.

2. Work with union health and safety programs to raise the consciousness that enforcement of health and safety codes requires literacy skills.

3. Provide training programs for union members to provide tutorial assistance to other members.

4. Provide assessment of basic skill levels at request of the union leadership, separate from management involvement.

5. Develop materials and provide instruction based on workplace issues.

As a marketing strategy, library programs should put together one successful project with one union which gives evidence that such a program works. The demonstration of success in one program will open the door for on-going relationships with other unions.

G. Providing Computer-assisted Instruction.

Libraries should seek out private sector donations of computers and software to provide for self-paced instruction as a supplement to tutorials or classes. This program not only provides a more intensive learning process as is necessary for employment-related programs, but also introduces participants to an important job-related tool. (New York libraries are currently using

computers as an important component of literacy instruction.)

* * *

The above suggestions have specifically focused on the kinds of connections which local library literacy programs can make with the employment and job training sector. The following recommendations are of a more general nature which relate to the role of the local library in the community. If the libraries can develop a process which increases the visibility of literacy issues and fosters the local library as a the central focal point of literacy services, the connections described above will be greatly facilitated.

H. Organizing Local Alliances, Securing Political Support, and Developing Public Awareness.

Many local libraries in the California Literacy Campaign are trying to develop local alliances and a base of support for literacy instruction. Others have worked to secure resolutions from various entities (State and local Labor Councils, City Councils, Chambers of Commerce, etc.) that highlight the literacy problem. But resolutions are not an end in themselves; and alliances on paper are not enough. The coalition-building which has begun with these actions must continue. The local libraries need to expand and build on these alliances in part on the basis of the employment and economic needs in their areas. The libraries must take a leadership role in organizing a working alliance which includes: Mayors and leading politicians; Chambers of Commerce and other business groups; unions; leading private sector employers; media representatives; volunteer literacy programs and churches; community-based and political organizations; and educators and providers, including school districts, community colleges and universites.

Such alliances will require organization and monitoring, but they do not require the development of a "formal" or structured system. Some alliances in other states are as "informal" as a monthly luncheon group (the Cleveland alliance began with a lunch, sponsored by the local community college, which invited local businesses, CBO's, and politicians to get together to discuss basic skills needs. Out of that lunch grew a continuing alliance to coordinate and facilitate literacy programs). Other alliances have been initiated by local politicians and mayors who took the lead in establishing a framework for the convening of a meeting of all interested parties (e.g. the Philadelphia program).

These should be working alliances which leverage real commitments of resources. Goals of these alliances should include:

1. Fund-raising from private sector members, including genera-

ting in-kind contributions.

2. Helping the libraries market their programs and those of other providers throughout different sectors of the labor market.

3. Developing public awareness of literacy problems throughout the community.

4. Leveraging money from other public sources.

5. Developing a plan for a continuum of literacy services to meet community and workplace needs.

We note here that organizing takes time and staff commitment. It will take work on the part of local libraries to form such alliances and continued work to keep them going. However, some of this work will hopefully become the responsibility of the alliance itself; and, we would argue that this role will be crucial to the effectiveness of the future of literacy service delivery in local areas.

I. Acting as a Resource and Referral Center.

The local library programs should play a central role in the coordination of literacy services, the dissemination of information about literacy throughout the community, the provision of technical assistance for other programs, and providing a central location for referrals from employers, job-training programs, unions, ABE, and the community. The designation of the local library as a central referral and information point in the delivery of services is crucial to insure that all sectors of the community and workforce are receiving literacy services appropriate to their needs.

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2. State Library

We believe that the success of the local library programs in forming partnerships with the employment and job training sector hinges strongly on the ability of the California State Library to provide organized statewide leadership and assistance to local programs. To achieve broad private sector participation, to secure adequate long-term funding, and to coordinate and cooperate with job training and education programs at the state level, the state library must play an active and direct role.

We believe that the State Library Literacy Campaign can take some steps in the immediate future to begin the process of strengthening the statewide delivery of literacy services. These steps need not initially involve significant changes in policy and program, or significant new resources. Rather, these steps involve efforts to broaden the public support, recognition and awareness of literacy problems as they relate to employment, and to leverage potentially available private and public resources, in order to further the development of on-going programs.

A. Initial Steps in an Action Process

1. <u>Building a working statewide alliance of employers, unions, literacy providers, and educators</u>.

"In order to get money, we all have to work together."

--Dr. William L. Burges, Vice President for Development, Cuyahoga Community College, Cleveland, Ohio

The beginning steps which the library has taken to form a statewide alliance should be activated as rapidly as possible, and formulated in such a way that it strengthens the connection between the labor market and literacy programs. The State Library should continue to play its leadership role in creating a statewide alliance. That alliance must include the following: job training providers; adult basic education and other educational providers, including the community colleges; representatives of community-based organizations; employers, particularly in such areas as insurance and finance; other private sector interests, particularly in publishing; labor unions; representatives of volunteer literacy organizations; and political leaders involved with literacy.

This alliance has several crucial functions. First, the success of this alliance is central to assisting the formation of local literacy alliances, as discussed above. In particular, private sector participants at the statewide level will be able

to provide strong leadership in developing private sector support at the local level, both for participation with local literacy programs and for providing financial assistance. In addition, such an alliance will establish the basis for broad support and visibility among policy makers.

Other functions of the alliance will be to promote public awareness of the problem, to provide assistance in linking job training programs with local literacy programs, and to set priorities and develop statewide strategies for funding. The alliance should also take the lead in organizing the conference recommended below. Once these coalitions are in place, both statewide and at the local level, a continuing network for on-going policy development will be in place.

2. Coordinating a Statewide Conference to Develop Constituency and Policy.

In conjunction with the development of the alliance, we recommend that the state library, with private sector funding, sponsor a statewide conference about literacy and employment in California. Participants in this conference would include members of the statewide and local alliances described above, representatives of the academic and political community, and nationally recognized figures in the literacy movement. This conference could be privately funded through sources identified in Appendix B.

The major objective of this conference is to bring together the key players in literacy and employment to address the following needs:

a. Coordinate efforts at the state and local level to insure effective linkages that best serve the adult learner population.

b. Develop policy recommendations and strategy for implementing those recommendations.

c. Discuss and develop possible legislation.

d. Develop a statewide strategy for building public support for programs related to literacy and employment.

3. Developing public awareness.

"What you have to do is create the climate so that everyone understands that illiteracy is a problem."

--Donald Mann, National Vice President for Personnel, Prudential Life Insurance

Public awareness is growing with regard to the literacy needs of

adults in California, based on efforts by both the local literacy projects and the national Ad Council Campaign sponsored by the Coalition for Literacy. However, there has been little recognition of the link between literacy and the economy in California. Other literacy campaigns (Philadelphia, Cleveland, Minneapolis-St. Paul) have placed strong emphasis on the connection between job needs and literacy skills. The California State Library should expand its public awareness campaign to include the following:

a. **Literacy/Employment information campaign.** A statewide public awareness campaign should be undertaken by the state library that focuses on issues of employment as they relate specifically to literacy. The commissioning of this report and its potential availability to California employers, politicians and educators might provide the first stage in developing that awareness. Public service spots, print media ads, and other aspects of the current public relations campaigns should specifically tie the issue of literacy to jobs and the economy.

In addition, we suggest that a professional literacy brochure be developed which explains and details the connection between literacy and employment in California. The brochure should describe the current availability of library literacy programs and other basic skills providers. This brochure would be used not only to raise public awareness, but also to raise private sector funds. Such a brochure could be funded by private sector donations. (See Appendix B).

b. **Employer survey.** Some of the most useful information available for this report has come from employer surveys, which have not been done in California. To increase private sector awareness of literacy issues, and to develop greatly improved data on the extent and perception of the problem, we propose that the state library undertake a survey of private sector needs as they relate to literacy. This study could be privately funded through a variety of sources identified in Appendix B, could be publicly funded as a joint project between the State Library and the Employment Development Department or the State Department of Commerce, or could be funded out of university research resources, including the Public Policy Seminar at Berkeley.

The goal of this public awareness campaign is to create a climate in which the development of public policy and the resultant commitment of both public and private resources to literacy providers is realized. Tying this public awareness campaign to employment issues, economic opportunity, and the California economy will provide a new direction for literacy services in this state.

* * *

B. Long-term Program Goals

The above has described a set of steps which can be taken in the immediate future to develop a base of public and private support, awareness, and a sense of direction for a statewide literacy mobilization. While we believe that the longer-term policy direction will evolve out of the process established in these initial steps, the following include some of the potential policies and programmatic actions which are necessary to improve the delivery of literacy services as they relate to employment.

1. Develop Long-term Funding Sources.

For the local literacy programs to market their services and form effective partnerships with the employment/training sector, and for the State Library to carry out its critical functions in coordinating literacy services, there must be adequate, stable, long-term funding and support. Both private and public sector sources of funding must be explored.

We have chosen to begin with private sector funding sources because of current constraints on public sector funds. Many would argue that the reliance on private sector funds is neither long-term nor stable. Our research has indicated that some literacy programs in other states exist almost totally through private sector donations; while these donations may not be adequate to the overall funding need, they do establish the basis for future successful directions. So far, the California Library Literacy Projects have not been able to realize the potential for private sector funds to provide program monies; we suggest that they need statewide assistance to perform this function.

a. Private Sector Funding

"The problem is not the money. Whether we make a commitment depends on if you ask for it and how you will spend it."

--Mr. William Speights, IBM Corporation, Atlanta, Georgia

The California Literacy Campaign has requested that local literacy programs generate their own additional sources of funding, including private sector donations. As we have noted, many programs in other states exist primarily through private source funding. All of those programs, however, have aggressive campaigns to seek out such funding; in some cases, full-time staff members are assigned fundraising duties. Local literacy programs run by the library do not have adequate staff resources or expertise to pursue private sector resources.

To access private sector and foundation monies, the state

library must provide professional assistance to local literacy projects. We recommend that the state library assign one professional staff member to develop these sources of funding on the state level and provide technical and fund-raising assistance to local programs to tap into the financial resources within their own communities.

At the state level, the goals of the fundraiser should be to develop five to ten large foundation grants or multi-year donations ($25,000.00 +) which will provide the seed money to further develop private sector funds.

At the local level, acquiring private sector funding requires a concerted effort by the local literacy programs to "sell" themselves and the literacy needs of adults in their community, to business. A major "selling" point is the role that the local literacy programs can and are playing in employment-related training. In some areas, employers may need to be convinced that funding for literacy programs will contribute to improved skills development and enhanced productivity of the workforce in their community.

We have identified in Appendix B, some sources of private sector funding. The experience of other programs in other states (Atlanta; Minneapolis-St. Paul) would indicate that such monies are available if they are pursued in the context of a coordinated literacy mobilization.

b. Public Sector Funding

Public sector funds may be divided into two possible categories: currently available funds and new program monies. As we have noted before, new program monies in this era of limited government commitment to social programs may be extremely difficult to secure. We have, therefore, in the following section indicated possible revenue sources from already existing funds as well as a strategy for developing support for new program monies.

While no new federal program money may be available, amendments to existing federal programs might be possible to direct money to literacy service providers. Various agendas have been suggested for changes in federal policy and programs, including amendments to JTPA which direct program monies more extensively into basic skills instruction, and expanded funding for the Adult Education Act.

For example, as the result of suggestions by a number of literacy providers, an amendment to the Adult Education Act has removed some of the legislative impediments from Section 310 monies so that community-based literacy service providers might quality for those funds.

One of the current federal sources which has been used to maximum advantage by the California State Library is Library Services and Construction Act (LSCA) funds. These funds provided the initial funding base for the library literacy programs on a one-time basis, and can continue to be used for new, untested projects on a demonstration basis.

Other resources which are currently available include leveraging of personnel for literacy programs. Many programs in other states utilize VISTA volunteers and ACTION funds. Volunteers are assigned as literacy tutors, trainers and coordinators. We recommend that local library literacy projects pursue this resource.

We also recommend pursuing allocation of federal and state work-study funds for purposes of underwriting literacy tutors and staff for local library programs. This approach was proposed in legislation in this past legislative session (AB 718, Hughes).

With regard to local public funding, many localities have already provided funding commitments to literacy programs through in-kind or staff contributions from the public libraries. As the alliances called for earlier become activated, cities and counties may be persuaded to add additional staff, facilities and funding to these programs.

An additional state commitment to the already existing state library literacy campaign may also be feasible. However, we would argue that those dollars will be easier to obtain in the context of a coherent public policy which clearly adresses the adult literacy problem.

The development of new program money at the federal level for literacy services is difficult at best. Kozol's call for a $10 billion dollar federal commitment is unlikely to be realized in the near future. Attempts are currently underway by the recently organized National Coalition on Urban Literacy and the Business Council on Effective Literacy to develop federal funding strategies. We believe that efforts to access new federal funds will be most effective if accomplished by a nationwide network (in which the California Literacy Campaign should be active). For purposes of this report, we will focus on strategies for state and local funding as the most realistic sources of new program monies.

2. Develop Statewide Program Elements

We believe that if a coherent program and a plan of action can be put together, new program monies may be available from the state and localities. So far, we have tried to describe the need for a system which coordinates the various elements and resources

currently addressing adult literacy problems. We believe that the following program elements should be present in any plan:

a. Designation of state library as the coordinating center for literacy.

We have argued that the connection between literacy, employment and the California economy should become a central theme of state literacy policy. In its coordinating role, the State Library should work with other state agencies to increase their awareness of literacy problems and help them develop their capabilities to respond. The range of activities here include working with the Departments of Commerce, Corrections, Employment Development, Social Services, and Education, among others.

In addition, the coordinating role of the State Library shall include activating and organizing the state task force/alliance as discussed earlier for purposes of developing public awareness, fund-raising and planning and coordination among members of the broader community.

b. Literacy assistance center.

The California State Library should firmly establish its current capability to act as a comprehensive center for literacy assistance. Such a center should:

1. Act as the information and referral center for all state and local literacy programs.

2. Provide professional fund-raising assistance to local library literacy programs, including pursuing foundation grants and private sector donations.

3. Act as the repository for data collection, evaluation and assessment.

4. Provide technical assistance to local literacy programs.

5. Train local literacy providers.

6. Assist local literacy projects in the development of local and regional coalitions.

7. Network with national literacy groups in an effort to develop nationwide literacy policy, including membership in the newly formed National Urban Literacy Coalition.

c. Demonstration project for a coherent local service plan

To demonstrate the capability of local libraries to coordinate

literacy services, expand their potential, and to relate to employment and the economy in a specific area, the state library should fund a literacy mobilization project in a city or county. Funding should be in the range of $75--100,000, with the expectation of developing local match from private and/or public sources. Some of this funding could come from current LSCA resources.

The components of the demonstration project are as follows:

a. Designation of local library as the central coordination entity. The additional resources should be used to strengthen the library's ability to make the critical linkages which we have discussed in this report.

b. Development of citywide coalition and alliance involving all local literacy providers (including library, volunteer, and community-based organizations); local politicians, especially the Mayor, city council members and school board members; employers and business interests, (including the Chamber of Commerce and business councils); all local labor unions; representatives of the education community, (including public schools, ABE, community colleges and universities); representatives of religious groups; all job-training providers(including JTPA-funded programs and vocational schools); and media representatives.

c. Creation of public awareness around the issue of literacy and employment. In particular, connections must be made to private sector employers.

d. Development of a comprehensive delivery system based on an assessment of basic skills needs of adults in the city. Such a delivery system should include a focus on employment and job training. This pilot project should demonstrate working relationships with JTPA, ABE, employers, labor unions, community colleges and community-based organizations.

f. Development of local private funding sources and generation of contracts with job training and employment sectors in an effort to utilize local program monies. Requirements for local sources of matching funds can be included.

g. Development of a clear evaluation system for tracking the progress of adult learners through the delivery system, and which reports back to the Legislature and Governor about the success of the program.

This demonstration project shall then serve as a model for a grants program administered by the state library. Future coordinated programs in additional geographic areas should work towards the goal of developing a coordinated system for the

delivery of literacy services throughout the state.

* * *

While many of the program elements described above may be possible under current legislative authority and funding, we believe that in order to achieve long-term, stable funding and to create the political and public awareness necessary for the on-going programs described throughout Section III, some new state legislation may be preferred. Such legislation could be useful to provide continued funding authorization for those programs already in place, to formalize and expand the networking and coordination role which we recommend for the library, to define the continuum of services, and to develop a grants program for coordinated local service delivery. Legislation which defines these functions clearly in statute helps develop the constituency base for literacy programs and provides clarity to political leaders about the direction and base of support for literacy programs.

* * *

Conclusion

In the limited timeframe of this report, we believe that we have only scratched the surface of the illiteracy problem in California. All of our statistics and other evidence suggest that the problem is real and growing, and that current available services are not meeting the needs of the adult illiterate population.

In Section III, we have outlined a plan for action for the California libraries to effectively develop partnerships with the employment and job-training sectors. These partnerships will further the continuum of services necessary to respond to the problem as identified in Section I.

The California Literacy Campaign of the State Library has made a significant contribution to the understanding and solution of the problem. We believe that the extent and scope of the library program--the only one of its kind in the United States--makes it a natural and likely resource for the expansion and coordination of efforts to combat illiteracy throughout California.

Appendix A

Interviews

California State Library

- Carmela Ruby
- Al Bennett
- Martín Gómez

Library Literacy Programs

- Sharon Pastori, Richmond Public Library, Richmond
- Suzanne Johnson, Los Angeles Public Library, L.A.
- Christine Saed and Lu Finch, Oakland Public Library, Oakland
- Theresa Rayburn, Pasadena Public Library, Pasadena
- Carlos Bataro, National City Public Library, San Diego
- Stephanie Smith, Watsonville Public Library, Watsonville
- Pat Osbey, Kern County Library, Bakersfield
- Carole Talan, Contra Costa County Library, Pleasant Hill
- Carolyn Moskovitz, Alameda County Library, Oakland
- Olive Gamble, San Francisco Public Library, S.F.
- Pat Zahn, Alameda County Library, Oakland
- Lilli Cumming, Humboldt Library Literacy Project, Eureka
- Joy Di-Loretto, Monterey Park Public Library, Monterey Park
- Virginia Parish, Santa Clara County Library, Milpitas
- Pat Torbett, Stockton-San Joaquin County Public Library, Stockton
- Barbara Clark, Los Angeles Public Library, L.A.
- Patricia Gannon-Lewis, Ventura County Public Library, Ventura
- Jim Halverson, Jr. and Chuck Battram, Modoc County Library, Alturas

Department of Education

- Dr. Jorie Mark, U.S. Department of Ed., Division of Adult Ed., Washington, D.C.
- Dr. Donald McCune, Manager, Adult Alternative & Continuation Ed. Services, Vocational & Continuing Ed. Division, Sacramento
- Dr. Lynda Smith, Adult Alternative & Continuation Ed. Services, Vocational & Continuing Ed. Division, Sacramento
- Dick Stiles, Adult Alternative & Continuation Ed. Services, Vocational & Continuing Ed. Division, Sacramento
- Carol Upton, Milpitas Adult School, Milpitas
- Joe Cooney, Director of Vocational Ed., San Mateo County Schools, San Mateo
- Rich Barbier, Adult Basic Ed. Coordinator, Milpitas School District, Milpitas
- Tom Bauer, Adult Alternative and Continuation Ed. Services Vocational & Continuing Ed. Division, Sacramento

- Natalie Carranco, Watsonville Adult School, Watsonville
- Michael Reilley, Adult Vocational Ed., State Dept. of Ed., Sacramento
- Dr. Gerald Kilbert, Employment Preparation Division, State Dept. of Ed., Sacramento

Job Training Programs

- Kathy Sage, Job Training & Partnership Office, Sacramento
- Marilyn Slotterbeck, Job Training Coordinating Council, Sacramento
- Robin Sellers, Golden Sierra Job Training Agency, Sacramento
- Bruce Franks, Potrero Hill Community Development Corporation, S. F.
- Patrick Boyle, Contra Costa Private Industry Council, Concord
- Linsey Fonick, Department of Social Services, Santa Clara County, San Jose
- Bernard Gunther, Private Industry Council, S.F.
- Phil Batista, Alameda County Training & Employment Board (ACTEB), Oakland
- Dan Fleming, Employment & Training Action Council, L.A.
- Carole Trovinger, Contra Costa Private Industry Council, Richmond
- Steve Plunk, Regional Employment & Training Council, San Diego
- Forrest Boomer, Employment Development Department, Welfare Programs, Sacramento
- Bill Brash, Employment Development Department, S.F.
- Werner Schink, State Employment Development Department, Sacramento
- Oscar Burgos, Center for Employment & Training, San Jose
- Jim Curtis, Job Training & Partnership Office, Sacramento

Labor

- Danny Beagle, International Longshore and Warehouse Union, S.F.
- Elaine Katz, Caterpiller Displaced Worker Project, San Leandro,
- Stan Jones, United Auto Workers, Fremont
- Lee Shore, Project Coordinator, Caterpiller Displaced Worker Project, San Leandro
- John Davies, AFL-CIO Central Labor Council, San Diego
- Joe Goglio, Contra Costa Central Labor Council AFL-CIO, Concord
- Denise Adams, Steelworkers Oldtimers Foundation, L.A.
- Francisco Juarez, United Farmworkers (UFW), San Jose
- Ron Pizel, California Labor Employment & Training Corporation, San Diego
- Jim Auerbach, Department of Ed., AFL-CIO, Washington, D.C.
- Kay Eisenhower, Service Employees International Union, Alameda County

Private Sector

- Dan Lacey, Business Council for Effective Literacy, N.Y., NY
- Paul Jurmo, Business Council for Effective Literacy, N.Y., NY
- Patty Prado, Pacific Gas and Electric Co., S.F.
- Lana Ready, Insurance Education Association, S.F.
- Carole Dunne, Apple Computer, San Jose
- Dr. Ross Grossman, Prudential Life Insurance Co., Woodland Hills
- Judy Wollen, Los Angeles Chamber of Commerce, L.A.
- Jack Kyser, Los Angeles Chamber of Commerce, L.A.
- Steve Chaudet, Lockheed Corporation, Burbank
- Lois Thorton, Golden State Mutual Life Insurance, L.A.
- Terry Orsini, TransAmerica Occidental Life Insurance, L.A.
- Dr. Iris Elfenbein, American Council of Life Insurance, Washington, D.C.
- Paul Gladfelty, California Manufacturer's Association, Sacramento
- Jean Hammink, B. Dalton Booksellers, Inc., Minneapolis, Minn.
- Kay Eu, San Francisco Chamber of Commerce, S.F.
- Carol Madigan, Times-Mirror Corp., L.A.
- Donald Mann, Prudential Life Insurance Co., Newark, N.J.
- Linda Stoker, Polaroid, Rochester, N.Y.
- Rosemary Remacle, INTEL Corporation, Santa Clara
- Bill Nilsson, Hewlett Packard, Palo Alto
- Steve Tedisco, San Jose Chamber of Commerce, San Jose

Literacy Providers

- Sharon Crater, Adult Learning Center, S.F. Community College District, S.F.
- Tom Sticht, Applied Behavioral and Cognitive Sciences, Inc., San Diego
- Joan Eads, Association for Community Based Education, Washington, D.C.
- Mike Fox, Push Literacy Action Now, Washington, D.C.
- Marcia Harrington, Push Literacy Action Now, Washington, D.C.
- Alice Bouren, California Literacy, Inc., Whittier
- Florence Peetz, California Literacy, Inc., San Gabriel
- Betty Bivens, WRITE, Inc., Chatsworth
- Carolyn Minor, Assault on Illiteracy, Sacramento
- Carrie Haynes, Assault on Illiteracy, Los Angeles
- Renee Lerch, National Adult Literacy Project, Andover, MA
- Dr. Bill Burges, Cayahoga Community College, Cleveland, OH
- Jacqueline Cook, Literacy Assistance Center, N.Y., NY
- Jinx Crouch, Literacy Volunteers of America, Syracuse, NY
- George Hagenauer, Literacy Volunteers of Chicago, Chicago, IL
- Jane Zinner, Dissemination Network for Adult Educators, Burlingame

Other Interview Sources

- Dr. Marciene S. Mattleman, Mayor's Commission on Literacy, Philadelphia, PA
- Margaret Robinson, National Adult Literacy Project, Far West Labs, S.F.
- Sandy Robinson, Ph.D. Candidate, American University, Silver Springs, Maryland
- Dr. Rosemary Parks, Associate Professor of Ed., University of Minnesota, Minneapolis, MN
- Ben Munger, Legislative Consultant, California State Senate, Sacramento
- Michael James, Project Literacy, S.F.
- Bob Arnold, Center for Continuing Study of the California Economy, Palo Alto
- Dr. Robert Campbell, National Center for Research in Vocational Education, Columbus, OH
- Greta Ploetz, Mary Winterbauer and Kevin O'Neil, Literacy 85 Project, Minneapolis, MN

Appendix B

As has been noted, many literacy programs nationwide are partially or almost wholly funded by private sources. Each has secured major foundation, trust or business support as on-going program money and then smaller contributions from smaller entities. Our suggestions below for potential funding sources should be further expanded in an effort to attract as much private sector monies as possible.

Private Sources Already Expressing an Interest in Literacy

1. CTB/McGraw Hill, Monterey, CA; Contact: Margaret Banks, Michael H. Kean
2. Times-Mirror Corporation, Los Angeles, CA; Contact: Carol Madigan
3. IBM, Atlanta, Georgia; Contact: Mr. William Speights
4. TransAmerica Occidental Insurance Co., Los Angeles, CA; Contact: Terry Orsini
5. Prudential Insurance Co., Los Angeles, CA; Contact: Dr. Ross Grossman
6. B. Dalton Booksellers, Minneapolis, MN; Contact: Jean Hammink
7. Gannett Newspapers
8. California Newspaper Publishers Association
9. The Printing Industries of America
10. American Newspaper Publishers Association
11. Paciic Gas & Electric Co., San Francisco, CA; Contact: Patty Prado
12. The Magazine Publishers Association of America

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